

Forest Insect Conditions
on the
Ashley National Forest, 1969

This is a report of forest insect conditions on the Forest during 1969. Material for this report was compiled from aerial reconnaissance data and from special on-the-ground evaluation surveys.

Briefly, the most important forest insect problem is the mountain pine beetle in lodgepole and ponderosa pines in and near Flaming Gorge National Recreation Area. The infestation is widely scattered with static to decreasing conditions expected in 1970. The small isolated outbreak in Uinta Canyon has been effectively suppressed. The spruce budworm caused light defoliation for the second straight year with a slight increase anticipated in 1970. The location of these and other insect problems are shown on your copy of the aerial survey map mailed earlier. A more complete discussion of these problems follows.

Mountain pine beetle, Dendroctonus ponderosae Hopk.

The two principal areas of mountain pine beetle activity are in and adjacent to Flaming Gorge National Recreation Area on the Manila District and in Uinta Canyon on the Roosevelt District.

The infestation on the Manila District began in 1965, reached noticeable proportions in 1968, and now shows signs of leveling off. Both lodgepole and ponderosa pine are attacked.

The present infestation, as recorded during the 1969 aerial survey, extends from Gorge Creek on the east, clear across the south portion of the recreation area, to Sheep Creek Lake on the west. Infested trees are very widely scattered with the largest concentrations being near Greendale Junction on the east and between Browne Lake and Hope Creek on the west. In between Red Canyon and the highway, only widely scattered tree killing occurred; considerably less than that recorded in 1968.

In order to determine the general infestation level and to gain an indication of trend, an on-the-ground evaluation survey was made in several areas during early October. The results of that survey follow:

Area	No. Attacks in <u>1969</u>	1968	Buildup ^{1/} Ratio	Infestation ^{2/} Intensity
Bootleg Campground	0	3		VL
Green Lake	0	0		VL
Allen Creek	11	0		VL
Cart Creek	2	5		VL
Greendale #1	21	24	1:1	L
Greendale #2	15	15	1:1	L
Summit Creek G.S.	3	11		VL
Half Moon Park	20	56	1:3	M
Ute Lookout	37	39	1:1	M

1/ In areas having negligible tree counts, buildup ratios are not applicable.

2/ VL, very light; L, light; M, moderate.

In general, that investigation indicates a static to decreasing trend over much of the infestation. In many areas, particularly in the eastern half of the infestation, infested or recently dead trees were difficult to find. Under these circumstances, and considering the fact that two tree species are involved, it is extremely difficult to determine relatively accurate buildup ratios. In any event, the number of new attacks did not exceed the old ones (Allen Creek is the sole exception).

Most of the mortality in 1970 will be in lodgepole pine. Redtops will still be noticeable to the immediate east of Greendale Junction, but they should not exceed the present level. The number of dead ponderosa pine east of Cart Creek and immediately south of Red Canyon will decrease. A few clumps of fading lodgepole pine will show up near the ridge top east of Cart Creek and in Cart Creek proper. Tree killing will maintain the same rate in both lodgepole and ponderosa pine in many of the steep, inoperable areas in Hope and Sheep Creek and their tributaries. Many of these infestation "pockets" will be visible from vantage points along the Sheep Creek Highway.

Control, other than planned logging, is not recommended at this time. Chemical or other treatment of individual infested trees would not only be extremely costly because of the scattered nature of the infestation, but it would do nothing more than possibly prolong the life of the infestation. Without converting the stands to a less susceptible state, which can be accomplished only by logging, the end result, with or without individual tree treatment, will be the same. Long term, effective control (if that is part of the management plan) can only be achieved by sequential logging of those areas of

greatest hazard--stands having a preponderance of large diameter trees. In and near recreation areas, where cutting is objectionable, very little can be done to preserve trees indefinitely. Cutting susceptible nearby areas will reduce the pressure on the recreation sites but will not afford a permanent solution. Some protection of individual high value trees can be obtained by preventive sprays and may lessen the impact in any one year. However, as long as high risk trees are present and the environs remain attractive to beetle populations and other natural enemies, mortality of some trees is imminent.

One possible solution to this alleged impact on recreation sites would be the introduction of nonsusceptible trees, such as exotic maples, ashes, and elms. If sapling size trees are planted now and given reasonable care during the establishment years, many will provide shade and esthetic enjoyment within eight to ten years. The possibility that they will be threatened, much less attacked and killed, by native organisms is remote.

The relatively isolated infestation in ponderosa pine in Uinta Canyon is now at a very low level. No redbuds were found during the aerial survey or later, during a followup ground examination. Some mortality occurred east of Cedar View Reservoir on the Uinta and Ouray Indian Reservation but significantly less than that recorded during the last two years. Widely scattered tree killing will continue in 1970 but at an endemic level. No control will be needed.

Spruce budworm, Choristoneura occidentalis Free.

The small rather remote outbreak that was first reported in 1968 continued in 1969. Meager larvae populations lightly defoliated slightly over 400 acres of Douglas-fir in Dry Fork just above Brownie Canyon. Systematic egg mass counts made this fall indicate that slightly heavier feeding activity can be expected in 1970, but it will not be heavy enough to cause very much damage. There will be little chance of infestation spread because of the lack of continuous host type. Control is not recommended.

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